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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,376	08/02/2001	Masahiko Sato	450100-03439	4275
20999	7590	01/25/2005		
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER SCHUBERT, KEVIN R	
			ART UNIT 2137	PAPER NUMBER
DATE MAILED: 01/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/920,376

Applicant(s)

SATO ET AL.

Examiner

Kevin Schubert

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11152002</u> . | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

Claims 1-16 have been considered.

***Claim Rejections - 35 USC § 112***

5            Claims 1-16 are rejected. The term "short-distance" in claims 1-16 is a relative term which renders the claims indefinite. The term "short-distance" is not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. An appropriate distinction of what differentiates a short-distance radio device from a regular radio device is required.

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

15            (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States  
20            only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

             Claims 1-4, 8-12, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Cotton, U.S.  
25            Patent No. 6,148,205.

As per claims 1 and 9, the applicant describes an authentication method for short-distance radio devices with the following limitations which are met by Cotton:

             a) preparing a condition where a plurality of radio devices exist, each of said radio devices  
30            comprising data communicating means for performing short-distance radio communication and authenticating means for performing authentication of said radio device (Col 2, lines 28-40; Fig 1);

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b) performing mutual authentication between two radio devices by said authenticating means automatically or after confirmation by users of said radio devices when the two radio devices come closer to each other to such an extent that coverage areas of radio waves generated by the two radio devices overlap with each other (Col 2, lines 34-40; Col 3, lines 39-46; Col 4, lines 23-28);

5           The applicant seeks to find a method where mutual authentication of devices is obtained without burdening the user with complicated input procedures such as ID and password. The method disclosed by applicant is based on the idea of having a device power down to limited communication capabilities when two devices which are to authenticate each other are placed in proximity of each other.

          Cotton discloses a method which seeks to solve the same problem the applicant seeks to solve:  
10   "there exists a need for a method and apparatus for secure registration within... a wireless network that requires minimal consumer intervention" (Col 1, lines 53-55). Cotton accomplishes this task in the same manner as the applicant's disclosed invention in which two devices authenticate themselves through an automatic or manually triggered process in which the devices are reduced to shortened communication capabilities during authentication.

15           Regarding part a), Cotton's system incorporates a base station and several access devices. Each of these devices is a radio device which generates and receives RF signals. Like the applicant's preferred embodiment of a cellular phone (Page 8), Cotton discloses the use of mobile phones as the access devices (Col 2, lines 28-40). Also, since Cotton's system takes place within a home, all the devices are short-distance.

20           Regarding part b), the base station authenticates the access device (Col 3, lines 39-46), and the access device authenticates the base station (Col 4, lines 23-28) when the access comes within the proximity of the base station (Col 2, lines 34-40).

          As per claims 2 and 10, the applicant describes the authentication method of claims 1 and 9,  
25   which are met by Cotton (see above), with the following limitation which is also met by Cotton:

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wherein the step of performing the authentication by said authenticating means is performed in a state where a transmission output of said radio device is reduced to shorten a communication distance of said radio device (Col 3, lines 20-27);

5           As per claims 3 and 11, the applicant describes the authentication method of claims 2 and 10, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

Wherein the transmission output is reduced only in a particular one of said radio devices (Fig 4);

Fig 4 depicts an access device which does not have its transmission output reduced. This means that only the base station has its transmission output reduced as one can see from 222 of Fig 2. One  
10       should also note that one embodiment of the invention has the limitation that the access device has its transmission output reduced as illustrated in 504 of Fig 5. Since the base station always has its transmission output reduced, this embodiment of the invention allows for both the base station and the access device having reduced transmission output while the embodiment of Fig 4 allows for only the base station having its transmission output reduced.

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As per claims 4 and 12, the applicant describes the authentication method of claims 2 and 10, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

Wherein the transmission output is reduced upon turning-on of an authentication button provided on said radio device (Col 3, lines 53-56);

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As per claims 8 and 16, the applicant describes the authentication method of claims 1 and 9, which are met by Cotton (see above), with the following limitation which is also met by Cotton:

Wherein said radio device is a portable device (Col 2, lines 32-47);

The applicant should note that the preferred embodiment involves portable phones that activate  
25       the registration when they come within the proximity of a base station.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cotton in view of Nealon, U.S. Patent No. 5,463,659.

As per claims 5 and 13, the applicant describes an authenticating method for short-distance radio devices according to claims 1 and 9, which are met by Cotton (see above), with the following limitation which is met by Nealon:

Wherein the step of performing the authentication by said authenticating means is performed in a state where reception sensitivity of said radio device is reduced to shorten a communication distance of said radio device (Col 8, lines 23-34);

Cotton describes all the limitations of the independent claims 1 and 9. While Cotton does disclose powering down the RF transmission signal, he does not disclose the use of reducing the reception sensitivity.

The applicant incorporates the use of reducing the reception sensitivity so that all attention is focused on the authentication method taking place between the two devices. Nealon discloses a registration system similar to both Cotton's and the applicant's in which the devices are powered down upon the initiation of a registration process so that no calls can be placed or received from the station and the only data that is being transmitted and received is the registration data. In this method the reception sensitivity is reduced to the point of being nonexistent except for the registration communication between the devices.

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to incorporate the ideas of Nealon with those of Cotton and have the reception powered down as well as the

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transmission for security purposes and for the purpose of having all attention being focused on the authentication.

As per claims 6 and 14, the applicant describes an authenticating method for short-distance radio devices according to claims 5 and 13, which are met by Cotton in view of Nealon (see above), with the following limitation which is also met by Cotton:

Wherein the reception sensitivity is reduced only in a particular one of said devices (Fig 4);

The use of powering down only one of the devices is met by Cotton. Though Cotton does not disclose reducing the reception sensitivity, if one were to incorporate such a feature into Cotton's system the idea of only powering down one of said devices is met through Cotton's disclosure. The applicant should also note that Nealon's system discloses the use of only powering down one device as well when he discloses only powering down the base station and its receiving and transmitting capabilities (Col 8, lines 23-34).

As per claims 7 and 15, the applicant describes an authenticating method for short-distance radio devices according to claims 5 and 13, which are met by Cotton in view of Nealon (see above), with the following limitation which is also met by Cotton:

Wherein the reception sensitivity is reduced upon turning-on of an authentication button provided on said radio device (Col 3, lines 53-56);

The use of an authentication button which sets up the authentication or registration and powers down the device is disclosed by Cotton. The applicant should also note that Nealon discloses an authentication button as well (Col 8, lines 23-26).

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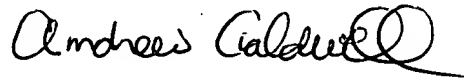
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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As per claims



**ANDREW CALDWELL**  
**SUPERVISORY PATENT EXAMINER**

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